

Design as an inspiration for sustainable lifestyle

Vidhya Govindan
Tampere University of
Technology
unicvidhya@gmail.com

Sakthikannan Sakunthaladevi
Ulaganathan
Fiat Chrysler, India
sakthikannan.u@gmail.com

ABSTRACT

To envision a sustainable society, it is not enough to have sustainable products and services; radical change has to happen in every individual's lifestyles and ways they interact with society. Design has the power to make the radical change happen and motivates people to embrace sustainable lifestyle. The paper discusses the concept of design as an inspirational tool towards sustainable lifestyle briefly and proposes a website based community model based on the concept. The model proposed in this paper can be validated and the effectiveness can be understood through a workshop and pilot study. The paper provides the steps to deploy the model as a pilot study and challenges involved in implementing this model.

Keywords

Sustainable Lifestyle, Design, Motivation, Communities

General Terms

Design, Human Factors

INTRODUCTION

"We should go about in the manner of a bee collecting nectar from a flower: The bee harms neither the fragrance nor the beauty of the flower, but gathers nectar and turns it into sweet honey." This is the vision about human activity in this world from a Buddhist saint Arahnt. This vision could be achieved when each human being ensures that his actions are not producing any damage to our earth's ecosystem. In today's complex consumption value chain, it is quite not easy for a person to ensure if his consumption does not disturb the ecosystem and leave any damage. Leaving aside the damage created by consumption, the pattern of increased consumption itself is noted as a big issue for sustainable lifestyle. The words minimize, zero impact, reduce are often associated with sustainable lifestyle and therefore irks people as consumers. In order to take the concept of sustainable lifestyle to masses, it is important to communicate through messages that catches attention from them and not irks them. This is especially important for causes like sustainability because there is no immediate or more financial benefits associated with these activities. Therefore participation in this sustainability oriented activities requires more intrinsic motivation from people as consumers. Take this example, "A middle aged lady purchased her groceries and near the billing counter she realized that she forgot her shopping bag and added a plastic shopping bag to her purchase". Most of our everyday purchases and consumption happen in similar

manner where people are either completely unaware of the consequences of their consumption or then have good knowledge about issues like climate change, environment conservation but could not translate into action. Therefore it could be seen that there is a significant reason to create systems which inspires consumers to lead a sustainable lifestyle. This paper takes the definition of sustainable living from "The Natural Step" [1] which conceived it as "The practice of sustainability is about creating new ways to live and prosper while ensuring an equitable, healthy future for all people and the planet". It has to be acknowledged here that lifestyle in developed countries varies greatly from developing countries. There is a surge in consumption of resources in everyday life in developed countries, for example packaged foods, increased gadgets and appliances, power demand and car travel. On the other hand, majority of consumers in developing countries do not consume in abundance but a segment of consumers termed as "new consumers" do enjoy affluent lifestyle. In order to channelize people towards sustainable lifestyle, it is important in the first place to provide necessary infrastructure which enables people to embrace sustainability in their everyday lives. For example, if the government does not provide separate waste bins to collect bio-waste and mixed waste, citizens do not have possibility for waste management in a sustainable manner. While this is true, there are many service organizations like DailyDump [2], a compost provider, which promotes bio-waste compost in a region where waste segregation infrastructure is not provided by government. Therefore, this discussion funnels down to a point which emphasize that when people are inspired towards sustainable lifestyle, there is always a way to achieve it. This paper proposes an approach on how to inspire people towards sustainable lifestyle and get it reflected on their everyday actions.

WHAT IS SUSTAINABLE LIFESTYLE?

Lifestyles refer to the ways we live our everyday lives to fulfill our needs and how we interact with the society and ecosystem [3]. They are closely associated to people's disposition of their status and interest. Along the same lines, sustainable lifestyles correspond to action and consumption patterns that people do to meet their basic needs, provide better quality of life while at the same time minimize natural resources usage, reduce waste and do not jeopardize needs of future generations. In simpler terms, a sustainable lifestyle is one which incorporates conscious

efforts towards preserving earth's ecosystem for our next generation. These definitions of sustainable lifestyle are from a broader perspective and in order to understand how it could be perceived in everyday lives, the framework shown in Figure 1 could be used.

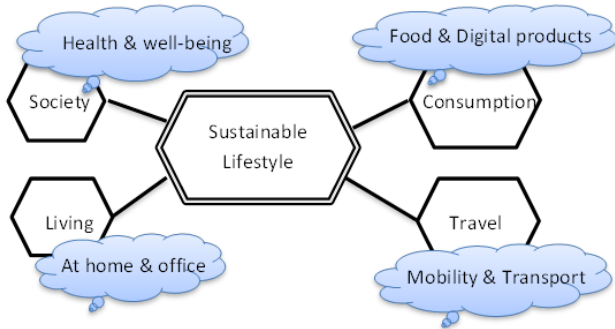


Figure 1. Sustainable lifestyle framework (Adopted from [3])

Before proceeding to define the activities that constitute these four categories of lifestyle which makes them call sustainable, it is equally important to ascertain those activities which are unsustainable and why? Marten [4] has pointed that main sources of unsustainable human ecosystem interaction is expanding human population along with expanding economy posing excessive demands on ecosystems. Marten [4] has put forth the main social forces that cause these unsustainable interactions which is shown in Table 1 below.

Before proceeding to define the activities that constitute these four categories of lifestyle which makes them call sustainable, it is equally important to ascertain those activities which are unsustainable and why? Marten [4] has pointed that main sources of unsustainable human ecosystem interaction is expanding human population along with expanding economy posing excessive demands on ecosystems. Marten [4] has put forth the main social forces that cause these unsustainable interactions which are shown in Table 1.

Table 1 highlights the sources of unsustainable interactions, and in order to understand how they are related to our everyday activities, concrete examples from everyday context has to be analyzed with respect to these five sources. For example, a European Union project reported that meat and dairy consumption accounts to one quarter (24%) of all final consumption impacts in Europe [5]. The per capita meat consumption of a European is 86kgs on the year 2007. This increased demand means that more cattle is reared and fed with water and crop, resulting in overexploitation of ecosystem resources. There are similar such examples of activities which when analyzed from a life cycle perspective could be linked to one or more of the sources of unsustainable ecosystem interactions. Though it may appear that most of our activities are directly or indirectly linked with these unsustainable sources, the

people of current generation have a choice to reduce their impact on the ecosystem.

Social force	How?
1. Human migrations	When people move in masses from one place to another (say from rural to urban), their interactions with ecosystem varies greatly and creates imbalance (increased resource usage).
2. New technologies	New technologies though brings in great productivity and efficiency they do have repercussions. People do not have lifecycle assessment of technology use and their impact to ecosystem which demands long term vision of using these technologies.
3. Tragedy of the commons	What is best for each individual is not best for all resource users together (say, traveling by car is easier for a person but adds pollution to the atmosphere).
4. Portable capital in market economy	Sustainable interactions promise long term returns, on the other hand, unsustainable ways attract huge returns lasting only for short term.
5. Alienation from nature	Increased urbanization has distanced away humans from nature and thereby slowly cutting down the emotional links man has for nature.

Table 1: Social forces for unsustainable interactions [4]

Marten [4] has emphasized that resilience (ability of ecosystems to function despite severe stress) and adaptive development (ability of social systems to cope with change) are the two important aspects to be taken care of whenever we undertake any activity. Based on these aspects a list of everyday activities pertaining to sustainable lifestyle could be prepared. However, as mentioned in the previous section, embracing sustainable lifestyle calls for actions from various levels. Figure 2 below captures the different levels involved in making sustainable lifestyle possible.

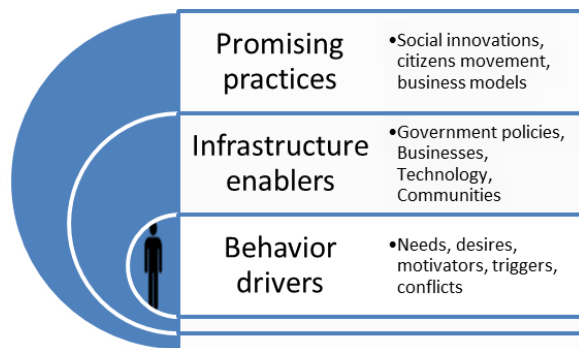


Figure 2. Different levels involved in sustainable lifestyle

As shown in Figure 2, practicing sustainable lifestyle can be achieved by individual commitment fuelled by internal motivation. Even with the presence of infrastructure, if an individual lacks motivation to use the resources effectively and lead sustainable lifestyle, the efforts and investment goes futile. For example, if a municipality provides collection points for electronic waste and the citizens are not motivated to drop their electronic waste there, the investment made by the municipality does not reap benefit. Therefore motivating people to make use of infrastructure towards sustainable lifestyle is as important as the investment for the infrastructure itself. In lifestyle concepts, behaviour is not described by social position; instead behaviour is understood as guided by motivation [6]. This discussion has established the need of individual motivation resulting in behaviour change towards sustainable lifestyle.

BEHAVIOR CHANGE

Behaviour change and motivation

Research on psychology revolves around the concepts of behaviorism and cognitivism. Behaviorism corresponds to analyzing behaviors by looking externally at what people do and cognitivism mostly focuses on mental states and analyzes what makes people to do something. Behaviorism discusses more on influencing behaviors through the use of a stimulus. The stimulus could be for example a sticker placed on your working table to remind you taking a break in every 20 minutes. The two different approaches towards behaviorism is classical conditioning (where the responses are altered based on the stimulus) and operant conditioning (where the consequences of a behavior alters the behavior itself). From the discussion of behaviorism two main views could be used to bring in behavior change. Firstly, learning how people respond to different stimulus and secondly, the circular process of action, feedback and response is powerful to motivate a behavior. According to Weiner [7], motivation corresponds to the set of determinants of a human activity. The study of motivation does not stop with analyzing what makes some people do some things, but also includes host of other things like, what action a person doing (choice of behavior), how much effort an individual puts (intensity of behavior), how long does a person is involved in the activity (persistence of behavior) and how an individual feel before, during and after the activity (emotional attachment to behavior). Motivation and behavior change are closely interlinked and are significant factors in embracing sustainable lifestyle. Several theories of motivation exist and each of them is used in specific context. Community based social marketing (CBSM) is a concept and tool which discusses in detail about motivation and design of programs to foster sustainable behavior. Next section of the paper will discuss CBSM concept and how it could be used to bring in behavior change.

Behaviour change in sustainable lifestyle

Community Based Social Marketing (CBSM) is based upon research in the social sciences that demonstrates behavior change is often most effectively achieved through initiatives delivered at the community level that focus on removing barriers to an activity while simultaneously enhancing the activity's benefits [8]. It complements the concept of social marketing along with social sciences and establishes that in order to influence behaviors that benefit society (public health, environment etc), it can be achieved best when targeted at a community level. The CBSM tool inherits different behavior change tools that can be utilized to foster behavior change and compiles it to a five step approach as mentioned below.

1. Selecting behaviors
2. Identify barriers and benefits
3. Developing strategy that reduces barriers and enhances behavior's perceived benefits
4. Piloting the strategy
5. Evaluate broad scale implementation and evaluation

CBSM has been used widely in various programs targeting behavior change towards social issues and environmental problems like persuading anglers to release rather than consume contaminated fish, encouraging employees to turn off their computers and monitors during weekend. The core of CBSM concept is attributed to aim at reducing barriers and augmenting the benefits. Figure 3 shows how the strategy could be developed based on the magnitude of barriers and level of benefits.

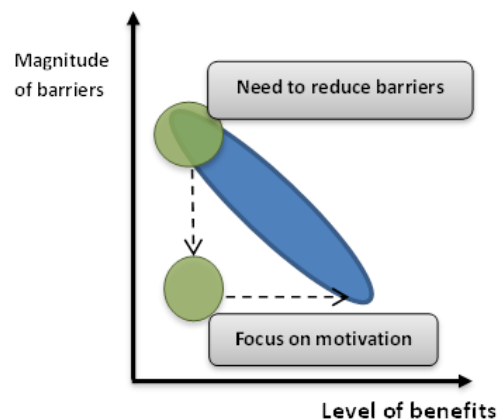


Figure 3. Strategy based on magnitude of barriers and benefits

As shown in Figure 3, when the magnitude of barriers is high (for example absence of bicycle lanes) for a particular behavior (foster eco-friendly transportation), it is pointless to put efforts in increasing motivation. Therefore in that case, the strategy should be to reduce the barrier. On the other hand, when the magnitude of barrier is low, the behavior can be fostered by enhancing motivation and make people realize the perceived benefits (for example health benefits of cycling). There are various forms of behaviour

change tools that can be used to motivate people towards making sustainable lifestyle choices. They are commitments, social diffusion, goal setting, social norms, prompts, incentives, feedback and convenience. This paper uses the CBSM concept and focuses on identifying ways to foster behavior change by enhancing motivation.

Influence of design in sustainable lifestyle

The word ‘design’ can be used either as a noun or verb. As a noun, ‘design’ refers to an object or entity created with intent and as a verb it refers to a process. In the context of sustainability, design is commonly used in both noun and verb forms. When used as a verb it is referred as ‘Design for Environment (DfE) or sustainable product design’ which lays emphasize on the process of design considering the aspects of environmental footprint, life cycle analysis and resource usage. On the other hand, design as a noun in sustainability context refers to an entity which is the product of a design process and can be [9],

- physical in the form of objects (house we live in, furniture etc)
- temporal as an event that occurs in time (a party or a gathering)
- conceptual referring to some idea (an activity to conserve water)
- relational such as interaction between two entities (proper usage of appliances to increase its lifetime)

When design is used as a noun in the above cases, it is mostly an experience and not intended to be an inspiration. While the primary focus is to make the product design sustainable, emphasis is not laid to instill the thought about sustainability in user’s mind. For example, if an individual commute to office by bicycle daily, but does not maintain the bicycle properly, it may be worn out soon therefore leading to buy new one. With the advent of increased gadgets and appliances, comes the increased appliance garbage. This relational thinking of sustainability can be applied to most of our everyday interactions. Figure 4 portrays the essence of this discussion.

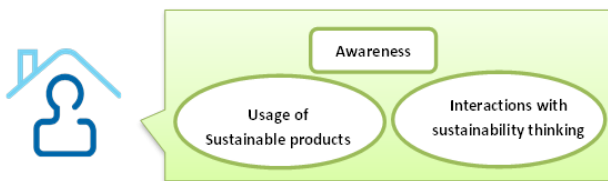


Figure 4. Role of design in sustainable lifestyle

As shown in Figure 4, design plays the role of creating awareness (like sticker designs pasted in waste bins), creation of sustainable products (like low energy CFL bulbs) and sustainability thinking (like proper usage of a computer). In order for an individual or a community to embrace sustainable lifestyle holistically, these three aspects need to be considered and for these to be effective,

techniques like Gamification as discussed in the next section could be deployed.

Gamification and behavior change

Gamification refers to applying game elements and structures to other business and programs with an intention to augment user participation. Gamification is a tool for motivation and is very effective to bring in behavior change. Gamification can be used as a tool for motivation to form certain habits and behaviors which are good for person, community and world. For example, we do know that running is a good exercise, but mostly people lack motivation to do it daily. Nike + is a Gamified system which motivates its customers to run and be part of the game. The game elements include points, rewards, leader boards, progression, resources, challenges, badges, collections, quests, social graph, virtual goods and the list grows on. However, not all the game elements can be used for instilling sustainable lifestyle behaviors. Take for example rewards which is the core of certain games; but when rewards are used to motivate towards sustainable behaviors it creates the danger of losing the interest when rewards are removed. Therefore it is important to choose certain game elements which would augment motivation and do not have repercussions. A Gamified system has to take care of two main aspects for it to be effective in the long run as shown in Figure 5.

1. Engagement loops
2. Progression loops

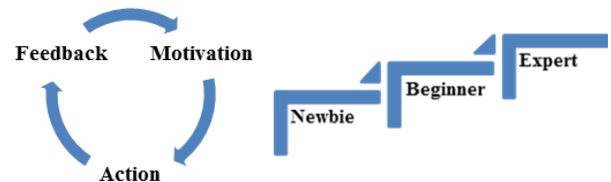


Figure 5. Engagement and progression loop in Gamification

PROPOSED MODEL

Design as an inspiration for sustainable lifestyle

Design could play a powerful role in inspiring human beings to lead a sustainable lifestyle. The core of the proposed model relies on using visual design in art forms and objects which would act as an inspiration for people to embracing sustainable lifestyle every day. The model inherits concepts from Community Based Social Marketing and is targeted to build a community of individuals interested in sharing their journey towards sustainable lifestyle. The model is primarily designed to be a web based platform to harness a sustainable lifestyle community and the concept is built based on three main themes namely,

- Co-creation
- Crowd sourcing
- Join me in Journey

Each of these themes is explained in detail below.

Co-creation:

The everyday activities an individual interacts at home, at work place, on travel have the potential to have an impact of sustainable lifestyle. However, not all people are inspired to protect the ecosystem and worried about the deterioration of earth's resources from an environmentalist perspective. A report by Unilever [10] refers to a statistic that only less than 10% of people are interested in caring and protecting environment, while the vast majority of 70% remain indifferent to these environmental issues. The paper therefore asserts if sustainable lifestyle has to be taken to mainstream it has to be communicated in other ways that would draw attention from the vast majority. On the other hand, people in general have some interests of their own, for example in sports, music, art, cooking, exercise, gardening etc. Therefore in order to take the concept of sustainable lifestyle to mass people, it is important to tailor the concept according to their interests. For example, sustainable lifestyle concept can be introduced to a cooking enthusiast as,

"If you host a party full of delicious recipes, take time to consider providing reusable dishes! Those paper and plastic cutlery of your guests fill up the landfill resulting in soil pollution. Enrich the soil which enriches your party with its energetic food materials."

The above example accompanied with an apt visual poster design would be more sensible to the cooking enthusiast than a general statement of "Use reusable dishes and protect soil pollution". This idea of tailoring the concept to varied interests cannot be carried out by a single source, say an NGO organization. In that case, it will become a unidirectional approach with people in the receiving end. The effectiveness of this concept can be augmented only when the users or targeted people participate in this concept. This can be achieved by providing a co-creation platform where people from varied interests can create visual designs accompanied with messages related to their interest towards sustainable lifestyle. This has the potential to create viral effect and produces ripples among people from related interests. Co-creation gives a user, pride of being part of creation and getting recognized by others from the community. Co-creation of visual designs in art and object forms can be used to influence three main aspects of sustainable lifestyle namely awareness about a certain activity or behavior towards sustainable lifestyle, using sustainable products or services and sustainability thinking. The co-creation concept is pictorially illustrated below in Figure 6.

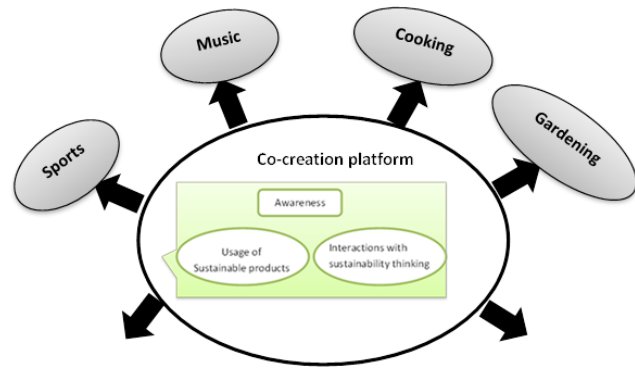


Figure 6. Co-creation in visual designs from varied interests.

The visual design refers to any art forms whose basic design could be shared in website and can be replicated by all users. It could be a poster, sticker, wall picture, a Do-It-Yourself (DIY) object or even a computer desktop background. Web technology provides excellent tagging opportunities to categorize these different design forms and therefore could facilitate users to choose the form which would suit them best. To illustrate these co-creation visual designs from varied interests, an example is given below.

"Sustainable lifestyle oriented activity: Shopping with Reusable bags

Theme: Sports

Aspects

1. *Awareness: Car sticker picture with a cloth shopping bag running longer than a plastic bag and a message 'This car always carries a shopping bag that lasts longer'*
2. *Usage: Making a DIY shopping bag keychain that reminds to take a shopping bag when going out.*
3. *Sustainability thinking: Wanted to say 'No' to the bags given for your purchase of clothes? But still wanted to show off that you bought from Nike? Save those initial trendy bags you got and remember to use them on your next visit; Reuse & Showoff"*

The example shown above could be just one version of the many more that each sport enthusiast could come up with and also inspire others in sports community. This concept could set a trend and make people think that embracing sustainable lifestyle is not only good but also trendy.

Crowdsourcing:

Few decades back, it is very common for tourists to rent a taxi when they visit a new place. The reason behind it could be a perceived hindrance of not knowing about the transport facilities available at that place. Thanks to crowdsourcing websites like Wikipedia, which helps tourists to understand the transportation possibilities and plan their travel well ahead. According to Merriam-Webster dictionary,

crowdsourcing is the practice of obtaining needed services, ideas or content by soliciting contributions from a large group of people. Crowdsourcing is an effective concept to engage users of a community to share their knowledge and provide a platform to help each other. To promote sustainable lifestyle and to give users a sense of knowledge sharing, crowdsourcing is used by this proposed model of “Design as an inspiration of sustainable lifestyle”. Crowdsourcing from a knowledge discovery and management perspective is used to collect rich information from various sources and manage information facilitating the retrieval process. Therefore crowdsourcing could be used effectively to collect and maintain locally relevant information about activities pertaining to sustainable lifestyle. A study [11] of why Americans don’t recycle highlights that more than 80% knew that recycling would reduce landfills, but still many of them do not recycle. The reason attributed to that is lack of correct knowledge hinders recycling efforts. In addition to that, people living in urban places do not have enough space to store unwanted stuff to recycle. This means that people do not know where to recycle, what to recycle and how to reduce their garbage. Especially each city council has different recycling rules to be followed. Crowdsourcing could be the apt solution for this caveat. Those people who already experts in taking their own steps towards sustainable lifestyle can provide information about recycling points, provide easily understandable recycling info graphics, possible ways to reduce garbage in their region (by buying cartons instead of cans, energy efficient stuff). A crowdsourcing platform provided in the website could help & guide the expert providers in sharing their knowledge and newbies to easily access local relevant experience. In order to understand the target audience and context of the crowdsourcing intended to be used, Erickson’s [12] four quadrant crowdsourcing model can be referred as shown in Figure 7 below.

	Same place	Different place
Same time	Audience-centric crowdsourcing	Event-centric crowdsourcing
Different time	Geocentric crowdsourcing	Global crowdsourcing

Figure 7. Four quadrant crowdsourcing model [12]

As seen in Figure 7, crowdsourcing has been widely used in contexts involving same and different places at same and different times. The crowdsourcing context referred here focusses more on people helping each other and reducing barriers in taking steps towards sustainable lifestyle and could be effective at regional level. Therefore it could belong to ‘Geocentric crowdsourcing’.

Though this crowdsourcing idea may look promising, the question arises on what makes an individual be it an expert or a newbie to share their knowledge in this website platform? The answer lies in deploying Gamification linked

with this crowdsourcing concept. There are some more commonly and popularly used Gamification elements like badges, rewards and quests. However most of them are related towards attaining a goal or an action and may not be suitable for recurring situations like leading sustainable lifestyle. The main aim of Gamification is to encourage participation of users in the crowdsourcing platform and that would mean regular visit to the website. Virtual goods aspect of Gamification could suit well for this intention and is utilized in this model to encourage user participation. Virtual goods should be closely linked with user activity and purpose behind the activity. Therefore, thematic virtual goods namely “Build your garden” or “Color your house” could be used. For example, the idea behind “Build your garden” is that the when an user contributes to crowdsourcing platform, a small plant is placed on user home profile and when many other users are getting benefit of it, the plant turns to a tree and starts blossoming. This idea closely interlinks the user activity to a Gamified system.

Join in Journey:

The third theme in this proposed model is termed as “Join in Journey”. Embracing sustainable lifestyle is like a journey, where an individual could face hindrances and rewards on the way. In an interview by earth911.com website, the reasons gave by all respondents for not recycling their used cans and bottles were lack of convenience. This response asserts that sustainable lifestyle does count on an individual’s commitment and taking an extra mile for that purpose. Being a community, an individual can raise interest on his fellow members to join his journey group in adapting a particular behavior or activity towards sustainable lifestyle. For example, if a group’s journey is to avoid food waste (during meals, unused rotten food in fridge etc), they could share their inspirations, experiences, hindrances faced, planning skills acquired, comment on others and can make their journey interesting. A report by Unilever [10] suggests, in order to translate sustainability into meaning for our everyday lives, it is important to demonstrate examples of what more sustainable living looks like. This concept could be seen as an online collaborative community effort towards knowing different ways to lead sustainable lifestyle. This differs from the crowdsourcing theme mainly because it is more towards sharing experiences and inspiring each other; while on the other hand, crowdsourcing is more towards sharing information alone.

Thus the proposed model uses these three main themes to disseminate design as an inspirational tool for embracing sustainable lifestyle. With this understanding of the proposed model, it is important to evaluate at what level (individual, community, policy makers etc) this model operates and how effective it is. This evaluation could be performed by utilizing the framework developed by the European Union project for sustainable lifestyles known as

SPREAD 2050 to establish four sustainable lifestyle scenarios for Europe in 2050 and is shown in Figure 8 below [13].

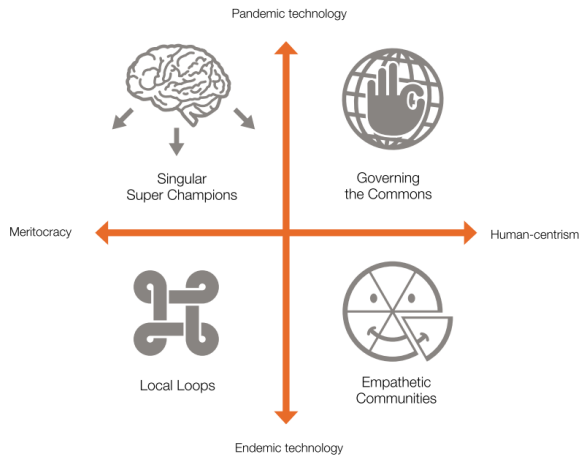


Figure 8. Four scenarios for sustainable lifestyles 2050: From global champions to local loops [13]

As seen in Figure 8, the scenarios are developed based on the factors namely, pandemic technology (global dominant technology), endemic technology (technology tailored to local needs), human centered (value human capital in all forms), meritocracy (emphasize more on professional skills). The proposed model based on the factors and its context, naturally falls under ‘empathetic communities’ scenario. The report highlights some aspects which are identified as base elements for ‘empathetic communities’ scenario and foresee possible lifestyles in 2050 which are mentioned below,

- Collaborative consumption
- Community oriented activities
- Knowledge sharing with more inclination towards Do-It-Yourself (DIY) concepts
- Public, private and people (PPP) welfare model
- New ways of living (interior designs, house grown vegies, flexible space)

These base elements are closely associated with the proposed model and indicate that the target audience for this model is ‘empathetic communities’. Therefore it could be asserted that, for this model to be effective, it has to use technologies that are relevant to local communities and also human centered (encompass human capital in all forms).

PILOT STUDY AND CHALLENGES INVOLVED

This concept could be deployed in a region where the internet penetration and participation in online activity is high. As the aim of the entire model is to understand how visual design in various forms like art, objects could inspire people and motivate them towards sustainable lifestyle, the magnitude of barriers towards sustainable lifestyle, in the

selected region should be low. This would imply that the region is provided with recycling facilities, public transport infrastructure (may not be widely used though) and if possible few city council programs for sustainable lifestyle. The pilot study could be performed by taking forward this model with the steps mentioned below.

- Choose a region that satisfies the criteria mentioned above.
- Design a minimal website for community participation with the three main themes as the core. Identify the sustainable lifestyle actions and behaviors applicable in that region and choose a list to focus. Ensure that the website has the options for sharing the discussions and user participation to social media. Prepare an initial resource base to trigger the discussion in the community.
- Identify a handful of local pioneers in the field of sustainability who could take up the role of experts. People from varied background like student organizations (ESTIEM-SERI for example), designers, academicians, businesses executives, artists, social and environmental activists could comprise the initial experts.
- Introduce the website and concept to general public during fairs, workshops, exhibitions and city days. Possible collaborations with local city councils programs for sustainable development could yield good results.
- Define a pilot study period and targeted user base number. Brief the user base about the pilot study, its aims and outcomes that would be shared at the end.

During concepting this model, certain challenges associated with piloting are also identified and mentioned below.

- Some ways to measure the impact – how far the information proposed have fulfilled individual’s needs; how far old behaviors unlearned (perhaps with some voting buttons on the website discussion platform?); consistency of the new lifestyle patterns.
- How to provide positive reinforcement which is critical in behavior change?
- What aspects could be considered to keep up the participation of newbies, beginners and experts while at the same time providing a sense of satisfaction?
- How to build and harness the interested community? There are several examples of successful online communities and also communities that could not sustain for longer time and slowly wither down. Threadless.com is an

example of a successful online community which has certain key features like giving users the power to mobilize their design that makes it stand out. Therefore in order to ensure longer withstanding of community participation, the model should be designed with some key features like more community contribution gives power to represent on behalf of the community.

CONCLUSION

The paper discusses briefly about sustainable lifestyles and the significance of focusing on instilling behaviors towards sustainable lifestyle as important as introducing new technologies, products and services towards sustainable development. A website model based on design as an inspirational tool to motivate and harness a community towards sustainable lifestyle is proposed. The proposed model has the potential to be deployed as a pilot project and could provide feedback and insights on the effectiveness of this concept. The paper briefly presents the steps and challenges involved in carrying out the pilot project.

REFERENCES

1. Step, The Natural. Sustainability Primer. 2009.
2. www.dailydump.org. [Online]
3. SPREAD 2050. SUSTAINABLE LIFESTYLES: Today's facts & tomorrow's trends. 2012.
4. Marten, Gerald G. Human Ecology - Basic concepts for sustainable development. s.l. : Earthscan publications, 2001.
5. Weidema, Wesnaes, Hermansen, Kristensen, Halberg. Environmental improvement potentials of meat and dairy products. s.l. : <http://ftp.jrc.es/EURdoc/JRC46650.pdf>, 2008.
6. Claudia Empacher, Konrad Götz. Lifestyle approaches as a sustainable consumption policy - a German example. The ecological economics of consumption. s.l. : Edward Elgar Publishing Limited, 2004, s. 251.
7. Weiner, Bernard. Human Motivation: Metaphors, Theories and Research. s.l. : SAGE publications, 1992.
8. Doug McKenzie-Mohr, Nancy R. Lee, P. Wesley Schultz, Philip Kotler. Fostering sustainable behavior. Social marketing to protect the environment. s.l. : SAGE publications, 2012, s. 256.
9. R, Miller William. Definition of Design. [Online] 2005. [Accessed: 27. May 2013.] <http://static.userland.com/rack4/gems/wrm/design/DefinitionOfDesign1.doc>.
10. Unilever. Inspire sustainable living. [Online] [Viitattu: 5. June 2013.] http://www.unilever.com/images/slp_5-Levers-for-Change_tcm13-276807_tcm13-284877.pdf.
11. Worthington, David. Infographic: Reasons why Americans don't recycle. [Online] Smartplanet, April 2012. [Accessed: 5. June 2013.] <http://www.smartplanet.com/blog/intelligent-energy/infographic-reasons-why-americans-dont-recycle/14937>.
12. Erickson, Thomas. Some thoughts on a framework for crowdsourcing . [Online] 2011. [Accessed: 5. June 2013.] <http://crowdresearch.org/chi2011-workshop/papers/erickson.pdf>.
13. SPREAD 2050. Scenarios for sustainable lifestyles 2050: From global champions to local loops. s.l. : <http://www.sustainable-lifestyles.eu>, 2012.